

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Canceled).

Claim 2 (Currently Amended): A The method according to claim \pm 30, wherein a pulse current phase ~~+27~~ is used as said first welding process phase having a high energy input.

Claim 3 (Currently Amended): A The method according to claim \pm 30, wherein a spray-arc phase is used as said first welding process phase having a high energy input.

Claims 4-5 (Canceled).

Claim 6 (Currently Amended): A The method according to claim \pm 30, wherein the duration of the ~~individual~~ first and second welding process phases is controlled as a ~~function of the~~ ~~adjusted welding current (I) and, in particular, directly~~

proportionally to the adjusted welding current (I) or an adjusted power, respectively.

Claim 7 (Currently Amended): A The method according to claim ± 30, wherein the ratio between the first welding process phase having a high energy input and the second welding process phase having a low energy input is changed as a function of the welding current (I) or an adjusted power, respectively.

Claim 8 (Currently Amended): A The method according to claim ± 30, wherein at least one welding parameter of the heat input into the workpiece ~~(16)~~ to be worked is selected or adjusted on the a welding apparatus ~~(1)~~, with the ratio between the first welding process phase having a high energy input and the second welding process phase having a low energy input being automatically determined and controlled as a function of the selected or adjusted heat input value.

Claim 9 (Currently Amended): A The method according to claim ± 30, wherein the ratio of the cyclically alternating first and second welding process phases is determined as a function of the parameters used for the welding process ~~such as, for instance, a welding current (I) and/or a parameter for the heat~~

~~input and/or the material of the workpiece (16) to be worked and/or the material of the welding wire (13) and/or the employed welding gas.~~

Claim 10 (Currently Amended): ~~A~~ The method according to claim ~~± 30~~, wherein the second welding process phase ~~(28)~~ having a low energy input is initiated by an action selected from the group consisting of specifying the number of pulses in the pulse current phase, ~~(27)~~ ~~or by~~ predetermining a time period, ~~and or by~~ applying a trigger signal.

Claim 11 (Currently Amended): ~~A~~ The method according to claim ~~± 30~~, wherein the welding process is started according to ~~the a~~ lift-arc principle.

Claim 12 (Currently Amended): ~~A~~ The method according to claim ~~± 30~~, wherein ~~an additional a third~~ welding process phase having a high energy input is implemented over a defined period upon ignition of the electric arc ~~(15)~~ and prior to the cyclic alternation of the at least ~~two different first and second~~ welding process phases.

Claim 13 (Currently Amended): ~~A~~ The method according to

claim ± 30, wherein the ~~energy input, in particular~~ the welding current (I)– during the ~~cold metal transfer~~ second welding process phase (28) is lower than the ~~energy input, in particular~~ the welding current (I)– during the ~~pulse current~~ first welding process phase (27).

Claim 14 (Currently Amended): A The method according to claim ± 30, wherein the wire advance speed is changed during the different first and second welding process phases.

Claim 15 (Currently Amended): A welding apparatus (1) including a welding current source (2), a control device (4), a welding torch (10) and a welding wire (13), wherein different welding parameters are adjustable via at least one device selected from the group consisting of an input device provided on the welding apparatus, an and/or output device (40) provided on the welding apparatus, or via and a remote controller, wherein an adjustment element for the adjustment of the heat balance or heat input into the workpiece (16) to be worked, via a cyclic combination of at least one a first welding process phase ~~having a low energy input and a second welding process phase having a high energy input, is arranged on the input and/or output at least one device (40) of the welding apparatus, and/or the remote~~

controller, wherein the first welding process phase has a high energy input and the second welding process phase has a low energy input, and wherein said the first welding process phase having a low energy input is comprised of a cold metal transfer phase (28), during which the welding wire (13) is conveyed in the direction of the workpiece (16) until contacting the same, and the wire conveyance is subsequently reversed after the creation of a short circuit, thus conveying the welding wire (13) back as far as to a predefined distance (30) from the workpiece (16) has a high current phase and a base current phase and the second welding process phase starts during the base current phase.

Claim 16 (Canceled).

Claim 17 (Currently Amended): A The welding device according to claim 15, wherein a ~~further~~ selection or adjustment element ~~(46)~~ is provided for the selection of the welding process phases to be used.

Claim 18 (Currently Amended): A The welding device according to claim 15, wherein at least one display ~~(42, 43, 44, 45)~~ is provided for the representation of at least one of the selected welding parameters and/or and the selected welding

process phases.

Claim 19 (Currently Amended): A The welding device according to claim 15, wherein a selection ~~or adjustment~~ element ~~(46)~~ is provided for the selection of the material of the workpiece ~~(16)~~ to be worked.

Claim 20 (Currently Amended): A The welding device according to claim 15, wherein a selection ~~or adjustment~~ element ~~(46)~~ is provided for the selection of the material of the employed welding wire ~~(13)~~.

Claim 21 (Currently Amended): A The welding device according to claim 15, wherein the first welding process phase is a pulse current phase and a cyclic combination of the ~~cold metal transfer~~ second welding process phase ~~(28)~~ with ~~a~~ the pulse current phase is adjustable at the at least one input and/or ~~output~~ device ~~(40)~~.

Claim 22 (Currently Amended): A The welding device according to claim 15, wherein the first welding process phase is a spray-arc phase and a cyclic combination of the ~~cold metal transfer~~ second welding process phase ~~(28)~~ with ~~a~~ the

spray-arc phase is adjustable at the at least one input and/or output device (40).

Claim 23 (Currently Amended): A The welding device according to claim 15, wherein a selection or an adjustment element (48) is provided for the adjustment of the ratio of the selected welding process phases and, in particular, the duration of the respective welding process phase.

Claim 24 (Currently Amended): A The welding device according to claim 18, wherein a memory is provided for the storage of welding parameter adjustments.

Claim 25 (Currently Amended): A The welding device according to claim 18, wherein the first welding process phase is a spray-arc phase and a cyclic combination of a the spray-arc welding process phase with a cold metal transfer the second welding process phase is adjustable at the at least one input and/or output device (40).

Claim 26 (Currently Amended): A The welding device according to claim 18, wherein the first welding process phase is a spray short-circuit arc welding phase and a cyclic combination

of a the spray short-circuit arc welding process phase with a cold metal transfer the second welding process phase is adjustable at the at least one input and/or output device (40).

Claim 27 (Currently Amended): A The welding device according to claim 18, wherein the first welding process phase is a pulse welding phase and the second welding process phase is a spray-arc welding phase and a cyclic combination of a pulse the first welding process phase with a spray-arc the second welding process phase is adjustable at the at least one input and/or output device (40).

Claim 28 (Currently Amended): A The welding device according to claim 18, wherein a selection or an adjustment element (48) is provided for the adjustment of the ratio of the selected welding process phases and, in particular, the duration of the respective welding process phase.

Claim 29 (Currently Amended): A The welding device according to claim 18, wherein a memory is provided for the storage of welding parameter adjustments.

Claim 30 (New): A method for controlling or adjusting a welding process using a melting electrode comprising the steps of:

(a) igniting an electric arc; and

(b) subsequently carrying out a welding process adjusted according to several different welding parameters and controlled by a control device using a welding current source;

wherein the welding process comprises at least a first welding process phase and a second welding process phase;

wherein the first welding process phase has a high energy input and the second welding process phase has a low energy input resulting from at least one of different material transitions and electric arc types;

wherein the first and second welding process phases are cyclically combined during the welding process to influence or control the heat input into a workpiece to be worked; and

wherein the first welding process phase has a high current phase and a base current phase and the second welding process phase starts during the base current phase.